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group, or New Caledonia; its western limit is New Guinea, and they are not found in New Zealand or Australia. North of the equator, they are found at the Pelew islands, and as far north as Tuam in the Ladrone islands. The New Hebrides and Solomon's island have afforded a few species," while the *metropolis* is situated in the Polynesian islands. Woodward, who makes, with others, the genus a section under *Bulimus*, gives its distribution as "Asiatic, Australian, and Pacific islands, South America."—*R. Ellsworth Call.*

RECENT BOOKS AND PAMPHLETS.—On the occurrence of *Spermophilus* beneath the glacial till of Norfolk. By E. T. Newton, F.G.S. pp. 4, plate. Extract from the *Geological Magazine*, 1882. London, 1882. From the author.

The New Zealand Journal of Sciences, devoted to the furtherance of natural and applied Science through the Colony. No. 2, Vol. 1, March. 1882. Price 25. 8vo, pp. 481, stitched.

The vagus nerve in the domestic cat (*Felis domesticus*). By T. B. Stowell, A.M., Ph.D. 8vo, pp. 26, 2 plates. Read before the American Philosophical Society, July, 1881. Philadelphia, 1881. From the author.

List of papers by William Healey Dall (Assistant U. S. Coast Survey, honorary curator U. S. National Museum) 1865–1882. 8vo, pp. 6. Philadelphia (?), 1882. From the author.

The Quarterly Journal of the Boston Zoological Society. Vol. 1, No. 2, April, 1881, 8vo, pp. 26. Boston, 1882. From the society.

Transactions of the American Institute of Mining Engineers. 8vo, pp. 80. Philadelphia. From the Society.

"Forest and Stream." Bird Notes, an index and summary of all the ornithological matter contained in "Forest and Stream." Vol. 1–xii. Compiled by H. B. Bailey. 8vo, pp. 196. New York, 1881. From the author.

Syllabus of Lectures on the Laws of Heredity and Principles of Breeding, given at the Sheffield Scientific School of Yale College, to students in the course in Agriculture and in Biology, January to April, 1878. By Wm. H. Brewer. 8vo pp. 12.

Fermentation in its Household Relations, pp. 26.—

The Causes which affect the Vitality of Seeds, pp. 16.—

The Principles of Breeding, pp. 18.—

Varieties of cultivated Plants; what they are, and how they are multiplied and improved, pp. 34.—

Agricultural Societies, and what they are and what they have done, pp. 30.

The Adaptation of Agriculture to the improvements in implements and transportation. By Professor Wm. H. Brewer of Yale College. 8vo, pp. 28. Extract from the report of the Secretary of Conn. Board of Agriculture. New Haven, 1880. From the author.

Notice of a work by Professor Nicholson on the genus *Monticulipora* and Description of two new genera and eight new species of fossils from the Hudson River group, with remarks upon others. By S. A. Miller. 8vo, pp. 20, 2 plates. From the Journal of the Cincinnati Society of Natural History, Vol. v, April, 1882. Cincinnati, 1882. From the author.

The Bird's-Nesting; a hand-book of instruction in gathering and preserving Nests and Eggs of Birds for purposes of study. By Ernest Ingersoll. 8vo, pp. 108, illustrated, bound. Salem, 1882. From the author.

First Lessons in Geology. By A. S. Packard, Jr. To accompany the Chataqua Scientific Diagrams. Illustrated 8vo, pp. 126. Providence, 1882. From the author.

Bulletin of the U. S. National Museum. Guide to the Flora of Washington and vicinity. 8vo, pp. 264, map. Published under the direction of the Smithsonian Institution, Department of the Interior. Government Printing Office, Washington, 1881. From the secretary of the department.

Palæontology. On the origin and development of existing Horses. By Jacob L. Wortman. pp. 16, illustrated. Extract from the Kansas City Review of Science and Industry. Kansas City, 1882. From the author.

Proceedings of the Academy of Natural Sciences of Philadelphia. 8vo, pp. 30. Philadelphia, 1882. From the society.

Proceedings of United States National Museum, April 10, 1882. 8vo, pp. 16. From the secretary.

A short study of the features of the region of the Lower Great Lakes during the Great River age; or notes on the origin of the Great Lakes of North America. By J. W. Spencer. 8vo, pp. 16. (From the Proceedings of the American Association for the Advancement of Science, Vol. xxx, 1881.) Salem, 1882. From the author.

Scheme of Colors adopted for the Charts of the U. S. Geological Survey, 7 chromolithographs, 4to plates. Washington, 1882. From the director.

Prospectus. Mt. Mica Tin and Mica Company. pp. 4. Bangor, 1882. From the company.

A manual for the use of Students in Egyptology. By Edward Yorke McCauley, U.S.N. 8vo, pp. 90. Extract from Proceedings of the Philosophical Society, Vol. xx, 1881. Philadelphia, 1881. From the author.

Dr. H. G. Bronn's Klassen und Ordnungen des Thierreichs, wissenschaftlich dargestellt in Wort und Bild. Fortgesetzt von C. K. Hoffman, professor in Leiden. Sechster Band. III Abtheilung. Reptilien. pp. 753-848. Tafel LXXVII-LXXXIV. Leipzig, 1882.

The American Journal of Science, June, 1882. From the editors.

Library of Harvard University. A Bibliography of Fossil Insects. By S. H. Scudder. pp. 47. Cambridge, 1882.

Catalogue des Mammifères vivants et fossiles. Par le Dr. E.-L. Trouessart. Fasc. II, Insectivora, pp. 67, 1880-81. From the author. Also by and from the same—

Le Role des Courants Marins dans la Distribution Géographique des Mammifères Amphibies, et particulièrement des Phoques et des Otaries, pp. 4. And—

Revision du Genre Semnopathèque (Semnopathicus), pp. 12. Ext. Courants de la Revue et Magasin de Zoologie, Paris, 1879.

Geology of Northwest Kashmir and Khagan (being sixth notice of Geology of Kashmir and neighboring territories). By R. Lydekker, B.A., F.Z.S., Geological Survey of India. Ext. from the Records Geol. Surv. India, Vol. xv, 1882, pp. 20, map and two plates. From the author.

Le Tunnel Sous-Marin du Pas-de-Calais. Compte Rendu d'une visite aux travaux préliminaires. Par M. C. Janet. Beauvais, 1882.

Palæozoic Geology of the region about the western end of Lake Ontario. By Professor J. W. Spencer, B.A.Sc., F.G.S. pp. 43, pl. 1. Ext. from Canadian Naturalist, Vol. x, No. 3. From the author.

On the Physical Structure and Hypsometry of the Catskill Mountain region. By Arnold Guyot. pp. 22, with large map and two small maps. Ext. from American Journal of Science, June, 1880. From the author.

Proceedings of United States National Museum, pp. 433-448, May 6th, 1882. Washington.

Bulletin of the U. S. Fish Commission, pp. 241-288. Washington, April 28, 1882. From the department.

Biogen, a speculation on the Origin and Nature of Life, pp. 27. By Dr. Elliott Coues. Washington, 1882. From the author.

Herpetologische Bemerkungen. Von Dr. J. G. Fischer, in Hamburg. Mit zwei Tafeln, pp. 21. Bonn, 1882.

Proceedings of the Philadelphia Academy of Natural Sciences. Part III, August to December, 1881, pp. 305-536, pl. iv. Philadelphia, 1882. From the society.

Défense des Colonies. V. Apparition et Réapparition en Angleterre et en Ecosse des Espèces Coloniales Siluriennes de la Bohême, pp. 77. Par Joachim Barrande. From the author.

Transactions of the American Institute of Mining Engineers. From the institute, Smithsonian Report, 1880. Washington, 1881. From the Smithsonian institution.

Geological and Natural History Survey of Canada. Report of progress for 1879-1880, pp. 555, pl. XIX, maps v. Montreal, 1881. From the director of the geological survey.

Bulletin of U. S. National Museum, No. 11. Bibliography of the Fishes of the Pacific coast of the U. S. to the end of the year 1879, pp. 73. By Dr. Theo. Gill.

Studien über das Milchgebiss und die Zahnhomologien bei den Chiropteren. Von Wilhelm Leche. Ext. Archiv. für Naturg., XXXXIII. Bonn.

Memoirs of the Boston Society of Natural History, Vol. III, No. v. Archypolypoda, a subordinal type of spined Myriapods from the Carboniferous formation. By S. H. Scudder. pp. 40, pl. IV.

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## GENERAL NOTES.

### BOTANY.<sup>1</sup>

AN ACTIVE DESMID.—I have been much interested lately in observing a species of desmid, *Cosmarium botrytis*. When in bright sunlight it has a slow rotary movement, turning successively from right to left and from left to right, with now and then (if my eyes did not deceive me) what might be called a spasmodic jerk. The play of the protoplasm within the plant-body is exceeding rapid, resembling, in the words of some writers, "the swarming of bees." There seems to be three centers of movements among the granules in each half of the desmid, but as to this I am not quite positive.

I have never seen the revolving motion of the plant excepting when in the full glare of the sun, even when it gave evidence of being alive by the movement of its protoplasm. I call attention to this because in the few books of reference accessible to me, I find no mention of a *revolving* desmid.—*Eloise Butler, Minneapolis, Minn.*

THE COFFEE-LEAF FUNGUS ONE OF THE UREDINEÆ.—In an interesting paper in the January number of the *Quarterly Journal of Microscopical Science*, H. M. Ward describes and figures all the known stages of the coffee-leaf fungus (*Hemileia vastatrix*) of Ceylon, and demonstrates its affinities with the ordinary Uredinæ, Puccinia, Uromyces, Melampsora, etc. When Berkeley described it in 1869, he considered it to be "with difficulty referable to any recognized section of fungi," and regarded it as intermediate between the old group Mucidines and the Uredinæ. Abbay and Morris subsequently came to the conclusion that the bodies considered to be spores by Berkeley, were sporangia, thus entirely unsettling for a time all previous notions as to the relationship of the parasite.

The gross anatomy of the coffee-leaf fungus is thus described by Dyer (*Qr. Jour. Mic. Sci.*, April, 1880): "To the naked eye

<sup>1</sup>Edited by PROF. C. E. BESSEY, Ames, Iowa.